

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1

9

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 09/22/2015		2. CONTRACT NO. (if any) EP-C-12-054		6. SHIP TO:				
3. ORDER NO. 0011		4. REQUISITION/REFERENCE NO. PR-R2-15-00201		a. NAME OF CONSIGNEE OW				
5. ISSUING OFFICE (Address correspondence to) (FOR U.S. MAIL ONLY) US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268				b. STREET ADDRESS US Environmental Protection Agency 26 West Martin Luther King Drive				
				c. CITY Cincinnati		d. STATE OH	e. ZIP CODE 45268	
7. TO: DEBORAH ELLISON				f. SHIP VIA				
a. NAME OF CONTRACTOR R T I International				8. TYPE OF ORDER				
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE		<input checked="" type="checkbox"/> b. DELIVERY		
c. STREET ADDRESS PO BOX 12194 (b)(4)				REFERENCE YOUR:		Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.		
d. CITY RESEARCH TRIANGLE PARK				e. STATE NC	f. ZIP CODE 277092194			
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE CPOD				
11. BUSINESS CLASSIFICATION (Check appropriate box(es))							12. F.O.B. POINT Destination	
<input type="checkbox"/> a. SMALL <input type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB								
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)		16. DISCOUNT TERMS		
a. INSPECTION		b. ACCEPTANCE						
17. SCHEDULE (See reverse for Rejections)								
ITEM NO. (a)	SUPPLIES OR SERVICES (b)			QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: (b)(4) The effective date of this Task Order is listed in block 1. TOCOR: Antony Tseng Max Expire Date: 03/27/2018 Continued ...							
18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.				17(h) TOTAL (Cont. pages)
		21. MAIL INVOICE TO:						
a. NAME		RTP Finance Center				\$327,261.00		
b. STREET ADDRESS (or P.O. Box)		US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive						17(i) GRAND TOTAL
c. CITY		Durham		d. STATE	NC	e. ZIP CODE	27711	
22. UNITED STATES OF AMERICA BY (Signature)				23. NAME (Typed) Tammy Adams TITLE: CONTRACTING/ORDERING OFFICER				

ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

PAGE NO

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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER	CONTRACT NO.	ORDER NO.
09/22/2015	EP-C-12-054	0011

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	Admin Office: CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268 Accounting Info: 15-16-B-87FT-202BD4X22-2505-1587TE2003-001 BFY: 15 EFY: 16 Fund: B Budget Org: 87FT Program (PRC): 202BD4X22 Budget (BOC): 2505 DCN - Line ID: 1587TE2003-001 Period of Performance: 09/22/2015 to 07/31/2016					
0001	Provide Services per the attached Performance Work Statement titled Caribbean Total Maximum Daily Loads (TMDLS) and Watershed Program Integration. Award Type: Cost-plus-fixed-fee Total Estimated Cost: (b)(4) Fixed Fee: (b)(4) Term Form Fully Funded Amount: \$327,261.00					
0002	Provide Services per the attached Performance Work Statement titled Caribbean Total Maximum Daily Loads (TMDLS) and Watershed Program Integration. Award Type: Cost-plus-fixed-fee Total Estimated Cost: (b)(4) Fixed Fee: (b)(4) Term Form (Option Line Item) Period of Performance: 08/01/2016 to 07/31/2017					
0003	Provide Services per the attached Performance Work Statement titled Caribbean Total Maximum Daily Loads (TMDLS) and Watershed Program Integration. Award Type: Cost-plus-fixed-fee Total Estimated Cost: (b)(4) Fixed Fee: (b)(4) Term Form Continued ...					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

PAGE NO
3

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER	CONTRACT NO.	ORDER NO.
09/22/2015	EP-C-12-054	0011

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	(Option Line Item) Period of Performance: 08/01/2017 to 03/27/2018					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

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SECTION B - Supplies or Services/Prices

B-1 Clauses

B-1 EPAAR 1552.217-71 OPTION TO EXTEND THE TERM OF THE CONTRACT-COST-TYPE CONTRACT. (APR 1984)

The Government has the option to extend the term of this contract for 2 additional period(s). If more than 60 days remain in the contract period of performance, the Government, without prior written notification, may exercise this option by issuing a contract modification. To exercise this option within the last 60 days of the period of performance, the Government must provide to the Contractor written notification prior to that last 60-day period. This preliminary notification does not commit the Government to exercising the option. The Government's estimated level of effort is 3,304 direct labor hours for the first option period and 2,976 for the second. Use of an option will result in the following contract modifications:

(a) The "Period of Performance" clause will be amended to cover a base period and option periods as follows:

<u>Period</u>	<u>Start Date</u>	<u>End Date</u>
Base Period	Date of Award	07/31/2016
Option Period I	08/01/2016	07/31/2017
Option Period II	08/01/2017	03/27/2018

(b) Paragraph (a) of the "Level of Effort" clause will be amended to reflect a new and separate level of effort of as follows:

<u>Period</u>	<u>Level of Effort</u>
Base Period	3,465
Option Period I	3,304
Option Period II	2,976

(c) The "Estimated Cost and Fixed Fee" clause will be amended to reflect increased estimated costs and fixed fee for each option period as follows:

	<u>Option Period I</u>	<u>Option Period II</u>
Estimated cost:	(b)(4)	(b)(4)
Fixed fee:		
Total:	\$231,590.00	\$210,042.00

(d) If the contract contains "not to exceed amounts" for elements of other direct costs (ODC), those amounts will be increased as follows: N/A

(End of clause)

B-2 Local Clauses 1552.211-73 LEVEL OF EFFORT - COST REIMBURSEMENT TERM CONTRACT (APR 1984) DEVIATION (AUG 1985)

(a) The Contractor shall perform all work and provide all required reports within the level of effort specified below. The Government will order 3,465 direct labor hours for the base period which represents the Government's best estimate of the level of effort required to fulfill these requirements.

(b) Direct labor includes personnel such as engineers, scientists, draftsmen, technicians, statisticians, and programmers and not support personnel such as company management, typists, and key punch operators even

though such support personnel are normally treated as direct labor by the Contractor. The level of effort specified in paragraph (a) includes Contractor, subcontractor, and consultant labor hours.

(c) Under any circumstances, if the Government orders or the Contractor provides less than 90 percent of the level of effort specified for the base period or any optional period exercised, an equitable downward adjustment of the fixed fee, if any, for that period will be made. The Government may require the Contractor to provide additional effort up to 110 percent of the level of effort for any period until the estimated cost for that period has been reached. However, this additional effort shall not result in any increase in the fixed fee, if any. If this is a cost-plus-incentive-fee (CPIF) contract, the term "fee" in this paragraph means "base fee and incentive fee." If this is a cost-plus-award-fee (CPAF) contract, the term "fee" in this paragraph means "base fee and award fee."

(d) If the level of effort specified to be ordered during a given base or option period is not ordered during that period, that level of effort may not be accumulated and ordered during a subsequent period.

(e) These terms and conditions do not supersede the requirements of either the "Limitation of Cost" or "Limitation of Funds" clauses.

(End of clause)

B-3 Local Clauses EPA-B-16-102 ESTIMATED COST AND FIXED FEE

(a) The estimated cost of this contract is (b)(4)

(b) The fixed fee is (b)(4)

(c) The total estimated cost and fixed fee is \$327,261.00.

(End of clause)

SECTION F - Deliveries or Performance

F-1 Clauses

F-1 Local Clauses EPA-F-12-101 PERIOD OF PERFORMANCE

The period of performance of this contract shall be from Date of Award through 07/31/2016 inclusive of all required reports.

(End of clause)

SECTION G - Contract Administration Data

G-1 Clauses

G-1 Local Clauses EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES

Task Order Contracting Officers Representatives (CORs) for this contract are as follows:

Antony Tseng, TOCOR, 290 Broadway, 24th Floor, New York, NY 10007-1866, Phone Number: 212-637-3777, Email: tseng.antony@epa.gov

Brent Gaylord, Alternate TOCOR, 290 Broadway, 24th Floor, New York, NY 10007-1866, Phone Number: 212-637-3868, Email: gaylord.brent@epa.gov

Contracting Officials responsible for administering this contract are as follows:

Tammy Adams, Contracting Officer, 26 W. Martin Luther King Drive, Mail Code: NWD001, Cincinnati, OH 45268, Phone Number: 513-487-2030, Email: adams.tammy@epa.gov

(End of clause)

SECTION J - List of Documents, Exhibits and Other Attachments

J-1 List of Documents, Exhibits, and Other Attachments

Attachment Number	Title	Date
1	Performance Work Statement	09/17/2015
2	TOCOR Appointment Memo	09/17/2015
3	Alternate TOCOR Appointment Memo	09/17/2015

PERFORMANCE WORK STATEMENT

TSAWP IDIQ MULTIPLE-AWARD CONTRACT SOLICITATION PR-R2-15-00201

CARIBBEAN TOTAL MAXIMUM DAILY LOADS (TMDLS) AND WATERSHED PROGRAM INTEGRATION

A. Background

On December 5, 2013, EPA announced a new collaborative framework for implementing the Clean Water Act (CWA) Section 303(d) Program with States — [A Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303\(d\) Program](#) (PDF, 11pp, 113K)

The new Program Vision details enhancements made to the CWA 303(d) Program informed by the experience gained over the past two decades in assessing and reporting on water quality and in developing approximately 65,000 TMDLs. It enhances overall efficiency of the CWA 303(d) Program, and in particular encourages focusing attention on priority waters and provides States flexibility in using available tools beyond TMDLs to attain water quality restoration and protection.

This new Program Vision reflects the successful collaboration among States and EPA, which began in August 2011. EPA looks forward to continuing its partnership with States to implement specific actions to realize the new Program Vision. With the recognition that there is not a “one size fits all” approach to restoring and protecting water resources, States will now be able to develop tailored strategies to implement their CWA 303(d) Program responsibilities in the context of their water quality goals. Accountability will be ensured through a new CWA 303(d) Program measure for FY 15 for tracking success in implementing these efforts that restore and protect the Nation’s streams, rivers and lakes.

While the Vision provides a new framework for implementing the CWA 303(d) Program, it does not alter State and EPA responsibilities or authorities under the CWA 303(d) regulations.

B. Tasks

SPECIAL POINTS OF INTEREST

All deliverables developed at any time in this Task Order must be provided to the TOCOR in electronic formats that is supported (i.e. PDF) and can be edited (i.e. Word, Excel) by EPA. GIS data must be in ArcGIS format.

Electronic deliverables can be transmitted to EPA using a data CD, data DVD, USB flash drive, and/or an external USB drive.

*All GIS and TMDL allocation deliverables will be accompanied by an electronic crosswalk table or GIS layer based on NHDPlus Version 2's NHDPlusCatchment layer. The NHDPlus Website for NHDPlus Version 2 can be found at:
http://www.horizon-systems.com/NHDPlus/NHDPlusV2_data.php.*

*The expression of loads in all the deliverables shall be in daily loads, unless otherwise indicated. The contractor is referred to the draft document entitled "Options for Expressing Daily Loads in TMDLs" dated June 22, 2007, for further technical guidance:
http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/2007_06_26_tmdl_draft_daily_loads_tech-2.pdf.*

Task 1: US Virgin Islands – Inventory of programs

The US Virgin Islands' 319 Nonpoint Source (NPS) program is endeavoring in the following NPS Program objectives (subject to change):

- Implement Earth Change Permitting Program: to be utilized as the primary mechanism to locate and address all land disturbing activities territory wide. The Earth Change permitting program is the Virgin Islands' primary way to address nonpoint sources of pollution in addition to watershed planning and implementation.
- Complete Watershed Assessment Reports: provides a new, cooperative process for restoring and protecting water quality on a watershed basis. An Action Plan calls on the territorial government to assess the condition of water resources.
- Develop Watershed Management Plans: to outline a comprehensive set of actions and overall management strategy for improving and protecting USVI from nonpoint sources of pollution derived from land use alterations and residential/commercial behaviors in watersheds. Watershed plans are intended to not only identify a set of key recommendations, but to identify specific partners and next steps towards implementation.
- Update USVI Environmental Handbook: to include USVI- specific design & performance standards, specifications, and training for stormwater best management practices (BMP's) to more effectively address land-based sources of pollution impacting shorelines and coral reefs. The handbook will have territory-wide applications for future development and redevelopment projects as well as provide key BMP performance information required for watershed planning efforts. This Environmental Handbook is an important part of VI's overall nonpoint source management plan and a tool to be used to address nonpoint sources of pollution in the Territory.
- Revise Stormwater Standards/Manual: Current stormwater management practices in the USVI includes runoff that contributes to erosion of guts and exposed soils, road surface deterioration, localized flooding, and water quality impairments in the USVI; the USVI does not currently have required criteria for sizing, design, and maintenance of post-construction stormwater best management practices (BMPs) to minimize these impacts; To fill these gaps, specific construction and post-construction stormwater standards are necessary to protect the important water resources in the USVI.

- **Implement Watershed Projects:** The USVI has been involved with the development of watershed management plans in several of Territory's 14 watershed management areas for many years and will select NPS projects that are coordinated with these efforts. Request for proposal to implement actions, BMPs or innovative measures which have been previously proven to be effective, and are contained in existing 9 element watershed plans will be the mechanism for awarding grant funds. Proposals must fall into one of the following two categories: Category I -Management Practices and Category II-Education and Outreach to Critical Audiences.
- **Monitor Water Quality:** Provides an assessment of the water quality conditions based on the implementation of the Non-Point Source Management Program. Two of the major non-point source problems affecting the Virgin Islanders are sedimentation and bacterial contamination. Sedimentation occurs when soil is eroded from the land surface, such as at construction sites, and deposited onto the land surface or into coastal water bodies. Bacterial contamination from sources such as failed septic systems, runoff from animal operations, and sewage discharged from boats can cause serious threats to human health
- **Protect and Restore Waters:** Protect and maintain unimpaired waters of the Territory from additional nonpoint source pollution, and restore or prevent further degradation of waters of the Territory impaired by nonpoint source pollution.
- **Integrate NPS Management into Other Programs:** Integrate management of nonpoint pollution sources into applicable Territorial and local agency programs (including both regulatory and non-regulatory programs), and provide overall policy coordination among Territorial, local and federal agencies.
- **Provide Guidance and Technical Assistance:** Develop and maintain the capacity of Territorial, local agencies, DPNR divisions and organizations to provide nonpoint source management assistance to communities and landowners through assessment, planning, technical support and education.

United States Virgin Islands' Coral Reef Management Priorities

(http://coralreef.noaa.gov/aboutcrp/strategy/reprioritization/managementpriorities/resources/usvi_mngmnt_clr.pdf) sets the following goals:

- **GOAL 1:** Reduce impacts to coral reef ecosystems by reducing terrestrial sediment and pollutant inputs and improving water quality.
- **GOAL 2:** Develop and implement a comprehensive education and outreach program to create buy-in and build public support for an effective coral reef conservation program that targets resource users, general public and decision-makers.
- **GOAL 3:** Increase the ability to effectively enforce existing rules, regulations and laws.
- **GOAL 4:** Reduce fishing impacts on critical stocks that most directly affect the health and resilience of the reef ecosystem.
- **GOAL 5:** Manage for resilience to climate change and related effects, including impact of elevated sea temperature; sea level rise; acidification and calcium carbonate dissolution;
- hurricane intensity/frequency and sedimentation to promote recovery of reefs from previous events.

- GOAL 6: Improve and enable coordination and communication among USVI Coral Reef Practitioners.
- GOAL 7: Reduce other sources of marine pollution and human impacts from areas that are most critical to coral reef protection and resilience.
- GOAL 8: Protect against, prepare for and control/manage invasive species.

These management priorities also specify the following priority sites (in order of priority)

- | | |
|----------------------|---------------------------------------|
| 1. Fish Bay, STJ | 9. STX Linear Reef |
| 2. Coral Bay, STJ | 10. Haulover Bay, STJ |
| 3. STEER | 11. Offshore Cays, STT |
| 4. STXEEMP | 12. NW Shore, STX |
| 5. Salt River, STX | 13. Mid-shelf Reef, STJ; Bikini Strip |
| 6. Botany Bay | 14. Mesophotic Reef, STT (Deep Reef) |
| 7. Magens Bay, STT | 15. Vessup Bay/East End, STT |
| 8. Hawksnest Bay STJ | 16. South Industrial Area, STX |

As part of the Coastal Zone Act Reauthorization Amendments of 1990, Congress enacted Section 6217 entitled "Protecting Coastal Waters". This provision requires states with coastal zone management programs that have received Federal approval under section 306 of the Coastal Zone Management Act (CZMA), to develop and implement Coastal Nonpoint Pollution Control Programs. These coastal nonpoint programs are to be used to control sources of nonpoint pollution which impact coastal water quality. Section 6217 requires coastal states to submit their coastal nonpoint programs to the National Oceanic and Atmospheric Administration (NOAA) and the Environmental Protection Agency (EPA) for approval. Section 312 of the Coastal Zone Management Act requires NOAA's Office of Ocean and Coastal Resource Management (OCRM) to conduct periodic evaluations of the performance of states and territories with federally-approved coastal management programs. Virgin Islands' coastal zone includes the entire territory - the islands and the waters extending seaward to the outer limits of the U.S. territorial sea. The coastal zone incorporates open waters, tidal flats, estuaries, bays, inlets, wetlands, lagoons, beaches, dunes, bluffs, and upland areas. The inland coastal zone boundary is divided into two tiers. The first tier is composed of a relatively narrow strip of land along the coast as well as all offshore islands and cays, except federal lands. All development activity in Tier I is subject to a Virgin Islands coastal zone management permit, which is issued by the Coastal Zone Management Commission. The second tier comprises the interior portions of the three main islands. Within Tier II, activities are subject to review by the Department of Public Works for compliance with earth change, subdivision, and zoning requirements.

The Office of Insular Affairs (OIA) provides grant funding for its Coral Reef Initiative (CRI) Program for management and protection of coral reefs in the insular areas. Highest priority is given to proposals that support local and regional priorities for protection and sustainable use of coral reefs. Priorities for each insular area are identified in each jurisdiction's Local Action Strategy and by the U.S. Coral Reef Task Force which may be accessed through the U.S. Coral Reef Task (www.coralreef.gov). Other types of Grant Assistance Funding may also be available for projects in the US Virgin Islands from this office.

There is concern that excessive inputs of nutrients from point and nonpoint sources are negatively impacting USVI's coastal marine waters. However, there is little information on the

temporal and spatial distribution of nutrients from either natural or impacted coastal waters. USVI DPNR generated a Nutrient Standards Plan in an effort to outline its approach to attaining numerical nutrient, Total Phosphorous (TP) and Total Nitrogen (TN), criteria for the USVI estuarine and coastal waters:
<http://water.epa.gov/scitech/swguidance/standards/criteria/nutrients/upload/USVI-2010-Nutrient-Plan.pdf>

Under EPA Contract EP-C-08-002, The Cadmus Group developed a report entitled Watershed Characterization and Planning for Pathogen Source Reduction in the U.S. Virgin Islands (September 2011). The report included an assessment of sanitary sewage, watershed planning, and green infrastructure. EPA's SUSTAIN was also used in this work.

Other environmental activities also include, but limited to, the following programs: USFWS Coastal Program; USDA Natural Resources Conservation Service; and NOAA's Coral Reef Early Warning System (Salt River).

The contractor shall inventory the territorial and federal programs that may be available for implementation of work that reduces pollutant loads to US Virgin Islands' waters. The contractor shall interview territory and federal staff of each of the programs as well as an internet search to complete this inventory. The inventory should include, at a minimum, the name of the program, the agency sponsor, the metrics used to measure completion of program projects, and whether the program generates data.

Task 2: US Virgin Islands – GIS Support

The contractor shall compile an electronic library unto a USB memory devices of the GIS shapefiles that are used to administer the inventory of programs completed in Task 1. For example, the contractor shall include, but is not limited to, a GIS shapefile for the 16 coral reef management priority sites, the individual tiers of CZMA, the US Virgin Islands 305(b) assessment units, the NHDPlusV2 catchment system for the US Virgin Islands, and inland freshwater/brackish springs. The contractor shall also collect and scan maps from programs should GIS shapefiles not be available.

The contractor shall provide all GIS data including metadata files: Metadata shall be developed for project-generated GIS and shall accompany the GIS deliverables. Metadata shall be compliant with the "Content Standard for Digital Geospatial Metadata" approved by the Federal Geographic Data Committee (FGDC). Metadata compliance can be checked using the following tool: <http://geo-nsdi.er.usgs.gov/validate.php>

Task 3: US Virgin Islands – modeling QAPP

The contractor shall consult all available sources of modeling and monitoring data which includes, but is not limited to, University of Virgin Islands, USGS NWIS, EPA's STORET, SWCDs, NRCS, land use data, dischargers, and farms.

The contractor shall submit a modeling QAPP(s) as applicable to the activities requested in Task 4 of this task order. The contractor shall submit for review and approval the QAPP to the TOCOR and the EPA QA Officer to be specified by the TOCOR. The contractor shall allow a 30 day review period for EPA to evaluate draft and final QAPP deliverables. The QAPP shall conform to EPA G5/M (December 2002, EPA/240/R-02/007) and G5/G (March 2003, EPA/240/R-03/003 at http://www.epa.gov/quality/qa_docs.html).

Task 4: US Virgin Islands – Integration of programs with TMDLs

The US Virgin Islands has completed 66 TMDLs that have been approved by the EPA (<http://iaspub.epa.gov/apex/waters/f?p=ASKWATERS:EXPERT:0:::::>). The following waters are potentially considered high priority by the 303(d) program for TMDL development within the next two years (subject to change):

1. VI-STC-33 Punnett Bay (Turbidity)
2. VI-STC-35 Tamarind Reef Lagoon (Southgate Lagoon) (Dissolved Oxygen, Fecal Coliform, Secchi Depth, Turbidity)
3. VI-STC-36 Green Cay Beach (Turbidity, Enterococci)
4. VI-STC-37 Southgate Subwatershed, Offshore (Dissolved Oxygen, Fecal Coliform, Enterococci, Turbidity)
5. VI-STJ-13 Coral Harbor (Turbidity, pH, Enterococci)
6. VI-STJ-15 Round Bay (Enterococci)

Watershed Management Plans are available for the following areas (it is noted that these are not EPA documents):

- Fish Bay/Coral Bay:
 - http://docs.lib.noaa.gov/noaa_documents/CoRIS/Coral_Bay_WMP_final.pdf
 - http://docs.lib.noaa.gov/noaa_documents/CoRIS/USVI-Fish_Bay_WMP_Final.pdf
- St Thomas East End Reserves (STEER):
 - http://data.nodc.noaa.gov/coris/library/NOAA/CRCP/project/20733/1305031_STEERWatershedPlanandapds.pdf
 - [http://www.horsleywitten.com/STEERwatersheds/pdf/CharacterizationReport/130531_STEERWatershedEx_Cond_Report\(wAppend\).pdf](http://www.horsleywitten.com/STEERwatersheds/pdf/CharacterizationReport/130531_STEERWatershedEx_Cond_Report(wAppend).pdf)
- St Croix East End Marine Park (STXEEMP):
 - http://data.nodc.noaa.gov/coris/library/NOAA/CRCP/other/other_crcp_publications/WatershedMgt/Final-STXEEMP-WMP.pdf

With regards to Salt River, the following documents are available.

- http://www.aoml.noaa.gov/general/lib/CREWS/Cleo/St.%20Croix/salt_river87.pdf
- <http://parkscaribbean.net/wp-content/uploads/2013/11/Ecological%20Characterization%20of%20Salt%20River%20Bay%20Park%20%282005%29.pdf>

The contractor shall develop TMDLs for Fish Bay/Coral Bay, St Thomas East End Reserves, St Croix East End Marine Park, and Salt River areas with a comprehensive implementation plan. The areas in question will be the watersheds for the four areas mentioned as described in the watershed plans referenced above (Fish Bay/Coral Bay, St Thomas East End Reserves, St Croix East End Marine Park, and Salt River) and the receiving waters/assessment unit from these watersheds to the extent of the territorial sea. The contractor shall develop one TMDL report for each area in question (total of four reports). The pollutants of concern for these TMDLs for all waters within each area will be sediment and a combination of pollutants identified on the 303(d) list within the area in question, the pollutants for which TMDLs have already been developed in the area in question, the pollutants identified in the watershed management plans in the area in question, and the stressors impacting the coral reefs in the area in question. . The comprehensive implementation plan shall include, but is not limited to, the following:

- Direct links to implementation to the TMDL allocations through the use of the inventory of programs from the previous task. For example, the implementation plan will include:
 - The nine elements required in 319 watershed plans.
 - Specify which BMPs meet which applicable NPS Objectives
 - Specify which BMPs meet which applicable Coral Reef management goals
 - Specify which BMPs meet which applicable Coastal Zone Management Act (CZMA) coastal nonpoint program requirements in Tier 1 or Tier 2
 - Specify which BMPs are under the USVI's Earth Change Permitting Program
 - Specify which BMPs address which pollutants of concern
 - Specify which set of BMPs will target to meet which applicable water quality standard
- Conduct a survey of live-aboard vessels, assess the usability of pump-out facilities, interview their residents on their waste practices, and solicit their suggestions to reduce their impact.
- Suggest innovative BMPs such as onshore public showers to address the impact of live-aboard vessels.
- Compare the known surficial geology of the area with areas that rely on septic systems for treatment of wastewater to comment on their proper placement.
- re-delineate the watershed drainage areas in the TMDLs, if applicable, to the catchment system for the US Virgin Islands available at http://www.horizon-systems.com/nhdplus/NHDPlusV2_data.php.
- Estimate the subset of the watershed load entering inland spring pools and appropriate BMPs specific to their location to protect them.
- Specify optimal locations for best management practice (BMP) combinations at various watershed scales based on cost and effectiveness. The contractor can use EPA's SUSTAIN system for the US Virgin Islands, when applicable.
- Where approved TMDLs overlap with the documents referenced above, the contractor shall specify the overlap and name the current deliverable(s) as an update to same TMDLs.
- Cost analysis for each recommended BMPs versus percent reduction of pollutant load, including sewerage areas that are not suitable for septic systems and constructing public showers and bathrooms for live-aboard residents.

- A display of implementation phases using the adaptive implementation approach with suggested steps that include monitoring and assessing as well as information on projected outcomes based on time and sequence of the order BMPs would be implemented.

The contractor can estimate two trips with two personnel to the three islands of the US Virgin Islands for two days to complete the surveys in this task (i.e. 6 days total per trip).

The contractor shall produce a TMDL support document that meets regulatory requirements for a TMDL as specified in Appendix A of this Task Order.

The contractor shall submit all data (e.g. GIS, spreadsheets, model code, modeling inputs/outputs, etc.) to the TOCOR upon completion of the TMDL support deliverables. The data must also be accompanied by an inventory list describing all the data used.

The contractor shall provide all GIS data including metadata files: Metadata shall be developed for project-generated GIS and shall accompany the GIS deliverables. Metadata shall be compliant with the "Content Standard for Digital Geospatial Metadata" approved by the Federal Geographic Data Committee (FGDC). Metadata compliance can be checked using the following tool: <http://geo-nsdi.er.usgs.gov/validate.php>

Task 5: Option Year 1 - Puerto Rico QAPP

The contractor shall consult all available sources of modeling and monitoring data which includes, but not limited to, University of Puerto Rico, USGS NWIS, EPA's STORET, SWCDs, NRCS, dischargers, and farms.

The contractor shall submit a modeling QAPP(s) as applicable to the activities requested in Tasks 6 and 7 of this task order. The contractor shall submit for review and approval the QAPP to the TOCOR and the EPA QA officer to be specified by the TOCOR. The contractor will allow a 30 day review period for EPA to evaluate draft and final QAPP deliverables. The QAPP shall conform to EPA G5/M (December 2002, EPA/240/R-02/007) and G5/G (March 2003, EPA/240/R-03/003 at http://www.epa.gov/quality/qa_docs.html).

Task 6: Option Year 1 - Puerto Rico TMDLs

Appendix B is a list of TMDLs with their respective parameters of concern which need TMDLs. The contractor shall review the available reports and data and complete the following:

- An early assessment to determine data gaps versus whether additional monitoring is required.
- Source identification and disaggregation by municipal boundaries for stormwater.
- Characterization of nutrient loads from WWTPs.
- A comprehensive implementation plan including:
 - the nine elements that must be addressed in 319 watershed plans.
 - Specify links of BMPs to Puerto Rico's Nonpoint Source Management Program (2014)
 - Specify which BMPs address which pollutants of concern

- Cost analysis for each recommended BMPs versus percent reduction of pollutant load.
- A display of implementation phases using the adaptive implementation approach with suggested steps that include monitoring and assessing as well as information on projected outcomes based on time and sequence of the order BMPs would be implemented.
- Monthly reports to assess progress and conference calls when needed.

The contractor shall produce a TMDL support document (i.e. one document) for waters listed as numbers 14 to 36 in Appendix B that meets regulatory requirements for a TMDL as specified in Appendix A of this Task Order. The contractor shall take a watershed approach and therefore the number of waters may include upstream assessment units not listed in Appendix B. The watershed drainage areas in the TMDLs should be delineated within Puerto Rico's assessment basin system and further broken down to the catchment system for Puerto Rico available at http://www.horizon-systems.com/nhdplus/NHDPlusV2_data.php.

The contractor shall submit all data (e.g. GIS, spreadsheets, model code, modeling inputs/outputs, etc.) to the TOCOR upon completion of the TMDL support deliverables. The data must also be accompanied by an inventory list describing the all data used.

The contractor shall provide all GIS data including metadata files: Metadata shall be developed for project-generated GIS and shall accompany the GIS deliverables. Metadata shall be compliant with the "Content Standard for Digital Geospatial Metadata" approved by the Federal Geographic Data Committee (FGDC). Metadata compliance can be checked using the following tool: <http://geo-nsdi.er.usgs.gov/validate.php>

The contractor shall also prepare an electronic library of the administrative records containing documents that support the establishment of and calculations/allocations for each of the TMDL support document deliverables. Components of the record shall include all materials relied upon to develop and support the calculations/allocations in the TMDL, including any data, analyses, or scientific/technical references that were used, records of correspondence with stakeholders and EPA, the contractor's assistance to the TOCOR in responding to public comments, and other supporting materials. This record is needed to facilitate public and/or EPA review of the TMDL. The contractor can exclude copyrighted material from the electronic library, but must include the reference in the Index of the Administrative Record required of each of the TMDL support documents. Any material in the Index of the Administrative Record should be properly cited in the TMDL support document deliverables. Any references made in the TMDL support documents should be properly documented in its Index of the Administrative Record.

Task 7: Option Year 1 – Translation of the Puerto Rico TMDLs

The contractor shall translate the final draft TMDL support documents from Task 5 into Spanish for public notice by PR EQB. The contractor shall use the native Spanish of Puerto Rico. The TOCOR will provide the contractor on comments on the Spanish translation of the final draft and final TMDL support documents.

Task 8: Option Year 2 - Puerto Rico TMDLs

Appendix B is a list of TMDLs with their respective parameters of concern which need TMDLs. The contractor shall review the available reports and data and complete the following:

- An early assessment to determine data gaps versus whether additional monitoring is required.
- Source identification and disaggregation by municipal boundaries for stormwater.
- Characterization of nutrient loads from WWTPs.
- A comprehensive implementation plan including:
 - the nine elements that must be addressed in 319 watershed plans.
 - Specify links of BMPs to Puerto Rico's Nonpoint Source Management Program (2014)
 - Specify which BMPs address which pollutants of concern
 - Cost analysis for each recommended BMPs versus percent reduction of pollutant load.
 - A display of implementation phases using the adaptive implementation approach with suggested steps that include monitoring and assessing as well as information on projected outcomes based on time and sequence of the order BMPs would be implemented.
- Monthly reports to assess progress and conference calls when needed.

The contractor shall produce a TMDL support document (i.e. one document) for waters in Appendix B not included in Task 6 that meets regulatory requirements for a TMDL as specified in Appendix A of this Task Order. The contractor shall take a watershed approach and therefore the number of waters may include upstream assessment units not listed in Appendix B. The watershed drainage areas in the TMDLs should be delineated within Puerto Rico's assessment basin system and further broken down to the catchment system for Puerto Rico available at http://www.horizon-systems.com/nhdplus/NHDPlusV2_data.php.

The contractor shall submit all data (e.g. GIS, spreadsheets, model code, modeling inputs/outputs, etc.) to the TOCOR upon completion of the TMDL support deliverables. The data must also be accompanied by an inventory list describing the all data used.

The contractor shall provide all GIS data including metadata files: Metadata shall be developed for project-generated GIS and shall accompany the GIS deliverables. Metadata shall be compliant with the "Content Standard for Digital Geospatial Metadata" approved by the Federal Geographic Data Committee (FGDC). Metadata compliance can be checked using the following tool: <http://geo-nsdi.er.usgs.gov/validate.php>

The contractor shall also prepare an electronic library of the administrative records containing documents that support the establishment of and calculations/allocation for each of the TMDL support document deliverables. Components of the record shall include all materials relied upon to develop and support the calculations/allocation in the TMDL, including any data, analyses, or scientific/technical references that were used, records of correspondence with stakeholders and EPA, the contractor's assistance to the TOM in responding to public comments, and other supporting materials. This record is needed to facilitate public and/or EPA review of the TMDL.

The contractor shall exclude copyrighted material from the electronic library, but must include the reference in the Index of the Administrative Record required of each of the TMDL support documents. Any material in the Index of the Administrative Record should be properly cited in the TMDL support document deliverables. Any references made in the TMDL support documents should be properly documented in its Index of the Administrative Record.

Task 9: Option Year 2 – Translation of the Puerto Rico TMDLs

The contractor shall translate the final draft TMDL support documents from Task 5 into Spanish for public notice by PR EQB. The contractor shall use the native Spanish of Puerto Rico. The TOCOR will provide the contractor on comments on the Spanish translation of the final draft and final TMDL support documents.

C. Schedule Of Benchmarks & Deliverables

All deliverables developed at any time in this work must be provided to the TOCOR in electronic formats that can be supported (i.e. PDF) and can be edited (i.e. Word, Excel) by EPA. All electronic deliverables must also be in a format that can be supported by EPA after the end of the Reports must be of high quality and 508 complaint: Work must reflect a high level of technical proficiency and be clearly explained and documented. The contractor shall include a certification of 508 compliance with each final electronic deliverable (see Section G).

Base Year:

Task No.	Deliverable	Schedule
1	1.1 Inventory	Draft deliverable within 2 months of award. Final deliverable within 2 weeks of receipt of comments <u>Milestone:</u> Interviews complete within 1.5 months of award
2	2.1 USB of GIS Files	Deliverable within 2 months of award
3	3.1 QAPP	Submission of Draft QAPP for review and approval within <u>30</u> calendar days of award. Submission of Final QAPP with contractor signatures that incorporates EPA QA Officer comments with <u>14</u> calendar days of receipt of EPA QA Officer's comments.
4	4.1 TMDL deliverable	Draft deliverable within <u>9</u> months of award Final deliverable within <u>1</u> month of receipt of comments
	4.2 Project Data	Final deliverable within <u>11</u> months of award
	4.3 Electronic Library	Final deliverable within <u>11</u> months of award

Task No.	Deliverable	Schedule
5 (option year 1)	5.1 QAPP	Submission of Draft QAPP for review and approval within <u>30</u> calendar days of start of option year 1. Submission of Final QAPP with contractor signatures that incorporates EPA QA Officer comments with <u>14</u> calendar days of receipt of EPA QA Officer's comments.
6 (option year 1)	6.1 TMDL deliverable	Draft deliverable within <u>9</u> months of start of option year 1. Final deliverable incorporates TOCOR comments with <u>14</u> calendar days of receipt of comments.
	6.2 Project Data	Final deliverable within <u>11</u> months of start of option year 1.
	6.3 Electronic Library	Final deliverable within <u>11</u> months of start of option year 1.
7 (option year 1)	7.1 Translation	Draft deliverable within <u>10</u> months of start of option year 1. Final deliverable incorporates TOCOR comments with <u>14</u> calendar days of receipt of comments.
8 (option year 2)	8.1 TMDL deliverable	Draft deliverable within <u>9</u> months of start of option year 2. Final deliverable incorporates TOCOR comments with <u>14</u> calendar days of receipt of comments.
	8.2 Project Data	Final deliverable within <u>11</u> months of start of option year 2.
	8.3 Electronic Library	Final deliverable within <u>11</u> months of start of option year 2.
9 (option year 2)	9.1 Translation	Draft deliverable within <u>10</u> months of start of option year 2. Final deliverable incorporates TOCOR comments with <u>14</u> calendar days of receipt of comments.

D. Validation Of Section 508 Compliance Of Task Order Deliverables

The Contractor shall support the TOCOR in conducting a “Final Deliverable Validation” to ensure compliance with Section 508 and the Federal Acquisition Regulations (FAR) related to “electronic and information technology (EIT) deliverables”. The Contractor shall furnish certification, in writing, to the TOCOR that the Contractor has complied with EPAAR Clause 1552.211-79 “Compliance with EPA Policies for Information Resources Management”, including the requirement that all electronic and information technology (EIT) deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/> .

E. Notification Of Completion Of Task Order Deliverables

In the event the Task Order reaches thirty (30) days prior to the end of the Period of Performance in a given period, and the contractor assesses that the contractor will not be able to satisfactorily complete any of the benchmarks, milestones, or deliverables by the end of the Performance Period, the contractor shall notify the TOCOR and the Contracting Officer (CO) immediately, in writing. Within five (5) business days of said notification, the TOCOR, in coordination with the CO, will provide technical direction concerning use of the remaining funding to prepare and furnish to the TOCOR: draft deliverables, interim work products, and any necessary working files in an electronic format which is supported by EPA.

F. Contractor Identification

Contractor personnel shall always identify themselves as Contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative.

The Contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the TOCOR.

G. Conference/Meeting Support Guidance

No individual event is anticipated to exceed \$20,000. The contractor shall immediately notify the EPA Contracting Officer, PO and TOCOR of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

H. Quality Assurance Surveillance Plan: Per contract requirements.

I. Travel: The contractor can estimate two trips with two personnel to the three islands of the US Virgin Islands for two days to complete the surveys in this task.

J. ATTACHMENTS:

Appendix A: Required Elements of a TMDL Support Document

Appendix B: Assessment Units/ Parameter Combination with high priority to development of TMDL, next two years (Puerto Rico)

APPENDIX A

Required Elements of a TMDL Support Document

1. Identification of Waterbody, Pollutant of Concern, Pollutant Sources, and Priority Ranking
 - A. Description of Waterbody and Background Information
 - B. Pollutant of Concern
 - C. Pollutant Sources
 - D. Priority Ranking
 - E. Expressing the TMDL through Surrogate Measures, if applicable
2. Description of the Applicable Water Quality Standards and Numeric Water Quality Target
3. Loading Capacity - Linking Water Quality and Pollutant Sources
 - A. Loading Capacity
 - B. Cause-and-Effect Relationship between Numeric Target and Pollutant
 - C. Critical Condition(s)
4. Load Allocations (LAs)
5. Wasteload Allocations (WLAs)
6. Margin of Safety (MOS)
7. Seasonal Variation
8. Reasonable Assurance
9. Monitoring Plan to Track TMDL Effectiveness
10. Implementation Plan
11. Index of the Administrative Record